On 27 September 2001, single examples of Orthopygia glaucinalis (L.) (Pyralidae) and of Small Blood-vein Scopula imitaria (Hb.) (Geometridae) occurred in my Garston m.v. trap. Autumn records of both species appear to have become frequent in recent years, and are probably no longer reported by many lepidopterists. In an excellent article, B. K. West (1989. Ent. Rec. 102: 109) draws attention to the recent increase in records of second brood Small Blood-vein and discusses discrepancies between statements concerning this phenomenon offered by modern and by older textbooks, pointing out that Barrett (1902, op. cit. VIII) states that a partial second brood of S. imitaria occurs in hot seasons in late August or September in very mild and sheltered districts. West suggests that, as the use of m.v. light was not available to the lepidopterist of the earlier era, S. imitaria was probably significantly commoner in the second generation in the nineteenth century than was the case through much of the twentieth century.

These last points are perhaps worth consideration in connection with the observations discussed earlier. It could be added that, prior to the recent interest in climatic change, the incentive to document unexpected dates of appearance in moths may have been less strongly felt than it currently is; such records might in the past have been more readily dismissed.

It goes without saying that none of the above in any way undermines the importance of reporting all dates that appear unusual.— C. M. EVERETT, The Lodge, Kytes Drive, Watford, Hertfordshire WD25 9NZ.

More reports of early insects

There have been several further reports of unseasonally early appearances of adult moths and other insects. The following have been received and are now placed on record:

LEPIDOPTERA

Gracillariidae

Phyllonorycter messaniella (Zell) Friar's Grove, Colchester, North Essex (VC 19), 25 March 2002 (B. Goodey).

Pyralidae

Pyrausta aurata (Scop.) – Eltisley, Cambridgeshire (VC 29). Warming up (just emerged?) on a stone in a herb garden at 11 am on 12 March 2002 (W. Kirby); Hertford, Hertfordshire (VC 20), one at light on 19 March 2002 (A. Wood).

Aphomia sociella (L.) – the Bee Moth. Rickmansworth, Hertfordshire, (VC 20). 1♀ at m.v. light at around 21.00 hours on 2 April 2002 (P. Clack). The bulk of dated Hertfordshire records fall in July and August, with a few in June; until now the earliest had been 24 May 1989.

Geometridae

Ligdia adustata (D. & S.) – Scorched Carpet. Wheathampstead, Hertfordshire (VC 20). A pristine example at a lit window, 5 April 2002 (T. Chapman). Of the dated Hertfordshire records, the previous earliest was on 24 May 1989.

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Noctuidae

Ochropleura plecta (L.) – Flame Shoulder – Layer de la Haye, North Essex (VC 19). One on 12 March 2002 (P. Pyke)

Noctua janthe (Borkh.) – Lesser Broad-bordered Yellow Underwing. Cheshunt, Hertfordshire (VC 20). One emerged from a pupa in a garden on 21 March 2002, hung about on some three-corned leek for a long while, and then flew off, completely ignoring the Robinson trap that had been operating less than two metres away the whole time (M. & H. Cooper). This is a phenomenally early record – all other dated Hertfordshire examples are from July and August, extending up to 2 September.

Lacanobia oleracea (L.) – Bright-line Brown-eye. Boreham, North Essex (VC 19). One at m.v. light, 24 March 2002 (G. Ekins). The previous earliest Essex record for this species was 2 April 1995 at Harlow (W. Last), but most Essex records are from May onwards (B. Goodey, pers. comm.).

Orthosia cerasi (Fabr.) - Common Quaker. Walters Ash, Buckinghamshire (VC 24). One on 11 November 2001 (N. Fletcher).

Cucullia verbasci - Mullein. Fernham, Berkshire (VC 22). One at 125w m.v. light, 24 March 2001 (S. Nash).

Acronicta rumicis – Knotgrass. Bishops Stortford, Hertfordshire (VC 20). A freshly emerged male at m.v. light, 9 April 2002 (C. W. Plant). Dated Hertfordshire records extend from May to September, with one on 9 October in 2001; the previous earliest record of a first brood adult in the county was 19 May 2001.

Colocasia coryli (L.) – Nut-tree Tussock. Boreham, North Essex (VC 19). One at mv light, 30 March 2002 (G. Ekins); Lemsford, Hertfordshire (VC 20). Two freshly emerged examples at m.v. light on 3 April 2002 (C. W. Plant). The previous earliest Hertfordshire record was 30 April 2001 and in most years the moth has appeared here in May.

COLEOPTERA

Cerambycidae

Rhagium mordax (Degeer) Two at Oak Hill Farm, Theydon Bois, North Essex (VC 19) – one on 19 March and one on 27 March 2002, both during daytime on a sunny wall of a building (T. Green).

DIPTERA

Syrphidae

Neoascia obliqua Coe Two males swept from amongst crowns of Butterbur Petasites hybridus, Lemsford Springs, Welwyn, Hertfordshire (VC 20), 3 April 2002 (C. W. Plant).

Further records of such out of season insects, in all Orders, are invited for future compilations. It will not escape the notice of the reader that all the records listed to date are from the south-east of the country. Is this truly a reflection of reality? – Colin W. Plant, 14 West Road, Bishops Stortford, Hertfordshire CM23 3QP (E-mail: Colinwlant@ntlworld.com).

Comments on supposedly earlier flight periods of spring moths

I suspect that the Editor would be disappointed were there no response to his request for comments on the reports of increasingly early records for the spring *Orthosia* species and indeed any other moths (*antea*: 66-68). The general assumption is that this trend reflects and thereby confirms the influence of global warming.

However, there are several problems with this interpretation. First, even if it is true that the very first individuals are emerging earlier, this does not necessarily imply that the median flight period of the brood as a whole has changed. Most individuals could still be emerging at their usual time. It is rash to predict the shape of the bell curve of emergence from a single point at its extreme beginning. Secondly, sampling errors can easily play a large part at the beginning of the curve. In years when the population is large, the bell curve will be higher and wider, so that the first individuals are out earlier. Also, the higher the numbers, the greater the chance of an observer catching one. By contrast, in a year when the population is low no individuals might be captured until nearer the peak of the flight period.

Thus, for convincing evidence that species are emerging earlier, we really need to compare graphs or histograms of the whole flight period over a series of years, rather than going merely by first or last dates.

It was brought home to me how misleading "first dates" can be during a sallowing session in Ashcombe Bottom near Lewes in East Sussex on 31.iii.1989. Nectaring on the golden catkins was a Scorched Carpet *Ligdia adustata*, making a delightful picture. Nor was it the only one that night, for I netted a couple more. The weather then turned cooler, and I did not see another until well into May. Did that make 1989 an early year for the Scorched Carpet? The main emergence was, if anything, slightly later than normal.

The occasional examples of the Common Quaker Orthosia cerasi that emerge in Autumn (Goodey, antea: 35; Hall, antea: 68) are surely a different case, but very interesting. If the habit became more frequent it might well lead to the rapid evolution of a new species, assuming the autumn and spring moths never had the opportunity to interbreed. There are some pairs of species which, we might surmise, arose in just such a way. Examples include the autumn-flying Scarce Umber Agriopis aurantiaria and its spring counterpart the Dotted Border A. marginaria, likewise The Streak Chesias legatella and the Broom-tip C. rufata. Alternatively, as the Common Quaker (like all Orthosia species) overwinters as a fully formed moth within the pupal case, perhaps the occasional autumn emergence is a relic of its ancestral habit and spring emergence the (relatively) recent development.— Roy LEVERTON, Whitewells, Ordiquhill, Cornhill, Banffshire AB45 2HS.